

CLAIMS

What is claimed is:

1. A tensioner for a traction member, in particular a belt of a traction drive for an internal combustion engine, comprising:
 - a base connected to a pivot arm, said pivot arm having a free end for connection of a rotatable tension roller which bears against a traction member;
 - a spring member urging the pivot arm to seek a forced engagement of the tension roller upon the traction member;
 - a damping element disposed between the base and the pivot arm for damping an adjusting movement of the pivot arm;
 - a pivot bearing swingably supporting the base on a machine part for rotation about the rotation axis;
 - an actuator supporting the base on the machine part and acting on the base for rotation about the rotation axis; and
 - a control unit for controlling an effective length of the actuator to thereby adjust a biasing force of the traction member.
2. The tensioner of claim 1 for a traction drive of an internal combustion engine, with the traction drive including a drive for a belt-propelled starter generator.

3. The tensioner of claim 1, and further comprising an electronic system for controlling the actuator in response to at least one ascertained parameter for adjusting the biasing force of the traction member.
4. The tensioner of claim 3, wherein the electronic system controls the effective length of the actuator in response to the determined parameter, wherein the at least one parameter is selected from the group consisting of generator power, biasing force of the traction member, operating direction of a torque in the traction member, rotation speed of a pulley of the traction drive, and reset moment of an electric motor.
5. The tensioner of claim 3, wherein the actuator is constructed so as to be movable in at least two positions.
6. The tensioner of claim 3, wherein the actuator is constructed so as to enable a continuous adjustment of a position of the actuator.
7. The tensioner of claim 1, wherein the actuator includes a ball screw drive.
8. The tensioner of claim 1, wherein the actuator is constructed to include a hydraulically or pneumatically operating control element.

9. The tensioner of claim 1, wherein the actuator is constructed to operate electromagnetically or electro-hydraulically.
10. The tensioner of claim 1, wherein the base is so positioned that a geometric disposition of the pivot bearing between the base and the machine part affects the biasing force of the traction member.
11. The tensioner of claim 1, wherein the actuator is connected via a toggle lever with the base.
12. The tensioner of claim 11, wherein the toggle lever is positioned against a stop member in one end position.
13. A tensioner for a traction drive, comprising:
 - a base swingably mounted to a fixed machine part of the traction drive for rotation about a pivot and supporting a tensioner arm;
 - a tension roller mounted on a base-distal end of the tensioner arm and bearing against a traction member;
 - an actuator for rotating the base about the pivot to thereby adjust a tension of the traction member.

14. The tensioner of claim 13, wherein the actuator is connected to the base at an attachment point at a distance to the pivot for defining a first lever arm, said tension roller defining a rotation axis at a distance to a symmetry axis of the base to define a second lever arm.
15. The tensioner of claim 13, wherein the actuator includes a control system having a sensor for determining an operating parameter of the traction drive and operating the actuator in response to the determined parameter for adjusting the tension of the traction member.
16. The tensioner of claim 13, wherein the actuator has a connecting rod having one end secured to the base and movable between a retracted end position and an extended end position.
17. The tensioner of claim 14, wherein the rotation axis of the tension roller and the pivot are in substantial coincidence.
18. The tensioner of claim 13, wherein the actuator is connected via a toggle lever with the base to realize a multiplication of a force applied upon the base.
19. The tensioner of claim 13, wherein the actuator is implemented in the form of a ball screw mechanism.